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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/717,270	11/22/2000	Takanao Suzuki	2018-354	1430

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EXAMINER

MOSLEHI, FARHOOD

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 04/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/717,270

Applicant(s)

SUZUKI, TAKANAO

Examiner

Farhood Moslehi

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-20 are presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3,6,9,11,14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sugita (5,506,994).

4. As per claim 1, Sugita teaches an electronic control unit comprising:

A plurality of CPUs (e.g. Figure 1);

A single non-volatile memory (e.g. Figure 2B. The two EPROMS are combined to make a single EPROM); and communication ports connecting the CPUs and the non-volatile memory one another, wherein a first one of the CPUs is programmed to check whether a second one of the CPUs is accessing the non-volatile memory before accessing the non-volatile memory, send to the second CPU a notification that the first CPU will access the non-volatile memory when a check result indicates that the second CPU is not accessing the non-volatile memory, and stops the notification to the second CPU after completing an access to the non-volatile memory (e.g. col. 4, lines 17-36).

5. As per claim 6, it is rejected for similar reasons as stated above.
6. As per claim 11, it is rejected for similar reasons as stated above.

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7. As per claim 14, it is rejected for similar reasons as stated above.
8. As per claim 2, Sugita teaches the electronic control unit wherein: the CPUs are connected through the ports (e.g. Figure 3); and the first CPU is programmed to set a signal level of the port to a level indicative of its accessing when starting to access the non-volatile memory (e.g. Figure 3).
9. As per claim 3, Sugita teaches the electronic control unit wherein: the CPUs are programmed to execute respective accessing to the non-volatile memory at different time points in initialization operations executed when a power supply to the CPUs is started (e.g. Figure 4, 13g. It is inherent with the system to access the EPROM at different times during the startup process since a shared bus id being used).
10. As per claim 9, Sugita teaches the electronic control unit wherein: the first CPU and the second CPU are programmed to retrieve respective individual data other than the same data separately from each other after receiving the same data (e.g. col. 3, lines 36-54).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 4-5,7,8,10,12,13,15-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugita in view of Brauninger et al (4,896,263).

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13. As per claim 4, Sugita does not specifically teach the electronic control unit wherein: the first CPU is programmed to execute initialization operations of system registers thereof in divided manner thereby to differentiate the time points of the initialization operations from that of the second CPU. Brauninger teaches the electronic control unit wherein: the first CPU is programmed to execute initialization operations of system registers thereof in divided manner thereby to differentiate the time points of the initialization operations from that of the second CPU (e.g. Figure 4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Sugita and Bruninger. The motivation would have been to have an initialization process during vehicle startup.

14. As per claim 12, it is rejected for similar reasons as stated above.

15. As per claim 13, it is rejected for similar reasons as stated above.

16. As per claim 19, it is rejected for similar reasons as stated above.

17. As per claim 5, Sugita does not specifically teach the electronic control unit wherein: high-priority data from the non-volatile memory in the respective initialization operations, and retrieves other low-priority data from the non-volatile memory only when required after completion of the initialization operations. Brauninger teaches the electronic control unit wherein: high-priority data from the non-volatile memory in the respective initialization operations, and retrieves other low-priority data from the non-volatile memory only when required after completion of the initialization operations (e.g. Figure 4). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Sugita and Bruninger. The motivation would have been to prioritize the data during system startup.

18. As per claim 15, it is rejected for similar reasons as stated above.

19. As per claim 7, Sugita does not specifically teach the electronic control unit wherein the second CPU is programmed to receive the data retrieving command from the first CPU. Bruninger teaches the electronic control unit wherein the second CPU is programmed to receive the data retrieving command from the first CPU (e.g. Figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Sugita and Bruninger. The motivation would have been to have one CPU control the retrieval of the data from EEPROM.

20. As per claim 10, it is rejected for similar reasons as stated above.

21. As per claim 8, Sugita does not specifically teach the electronic control unit wherein: the first CPU and the second CPU are programmed to be synchronized with each other and receive the same data from the non-volatile memory after being synchronized. Bruninger teaches the electronic control unit wherein: the first CPU and the second CPU are programmed to be synchronized with each other and receive the same data from the non-volatile memory after being synchronized (e.g. Figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Sugita and Bruninger. The motivation would have been to have to access the EEPROM data simultaneously.

22. As per claim 16, it is rejected for similar reasons as stated above.

23. As per claim 17, it is rejected for similar reasons as stated above.

24. As per claim 18, it is rejected for similar reasons as stated above.
25. As per claim 20, it is rejected for similar reasons as stated above.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent number 5,890,080 to Coverdill et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhood Moslehi whose telephone number is 703-305-8646. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 703-305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5484.

fm

 **JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**